

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Effects of Communications Towers on Migratory)	WT Docket No. 03-187
Birds)	

COMMENTS OF VERIZON WIRELESS

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SUMMARY

Verizon Wireless recognizes the importance of the Commission's investigation into the effect that communications towers might have on migratory birds and the need to protect migratory bird populations from significant environmental threats. The record, however, does not support adopting any migratory bird-related tower siting regulation at this time.

Regulations should not be adopted because there is not sufficient evidence to demonstrate that communications towers are having a significant impact on migratory bird populations. In conjunction with this proceeding, two major analyses of the scientific evidence of bird collisions with communications towers were conducted; one by Woodlot Alternatives, Inc. on behalf of CTIA and NAB, and another by Avatar on behalf of the Commission. Significantly, both Woodlot and Avatar failed to establish any conclusive link between bird collisions with towers and a decline in any migratory bird population. Indeed, Woodlot found that far more migratory bird deaths were due to domestic cats, buildings, windows, transmission lines, pesticides and vehicle collisions. Both Woodlot and Avatar also concluded that more research was needed to study the effects of towers on migratory birds.

Dr. Joelle Gehring also submitted a study of bird collisions with a handful of tall and medium height communications towers in Michigan. Dr. Gehring observed fewer collisions with medium height, unguyed towers, as compared to tall and medium height guyed towers. Dr. Gehring also found more collisions with towers equipped with steady-burning red lights as compared to towers equipped with only white or red strobe lights. However, Dr. Gehring's results cannot be used as the basis for any regulatory action because her study was limited in the number of towers studied and in the period over which they were studied.

The scientific evidence on the record in this proceeding does not support Commission tower siting regulation to protect migratory birds.

Migratory bird-related regulations also should not be adopted because neither the National Environmental Policy Act of 1969 (NEPA) nor Migratory Bird Treaty Act (MBTA) require Commission action. NEPA requires the FCC to analyze environmental effects only if there is a major federal action and that action will significantly affect the quality of the human environment. However, the record in this proceeding fails to establish that communications towers have a significant impact on migratory birds. The MBTA does not provide a basis for FCC action because it only authorizes the Department of the Interior to adopt regulations to implement the provisions of the MBTA.

The Commission should not adopt any of its proposals to regulate the placement, lighting and design of communications towers in order to protect migratory birds. The scientific evidence submitted in the proceeding does not demonstrate that any particular tower lighting system, any tower structure support system, any tower height, or any particular tower location leads to any significant increase in migratory bird collisions with communications towers. Commission regulation of these aspects of tower siting, on the other hand, will increase carrier costs will impose further delays in the siting process. As a result, it will become substantially more difficult on carriers to expand their service offerings to the public.

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Verizon Wireless hereby submits its comments in response to the Notice of Proposed Rulemaking (“NPRM”) released by the Federal Communications Commission (“FCC” or “Commission”) in the above-captioned proceeding. In the NPRM, the Commission generally seeks information and comments pertaining to whether the FCC should take measures to reduce the number of instances in which migratory birds collide with communications towers.

Verizon Wireless recognizes the importance of the Commission’s investigation into the effect that communications towers might have on migratory birds and the need to protect migratory bird populations from significant environmental threats. Verizon Wireless, however, opposes any migratory bird-related tower regulation. Regulations should not be adopted (1) because there is not sufficient evidence to demonstrate that communications towers are having a significant impact on migratory bird populations; (2) because neither the National Environmental Policy Act of 1969 (NEPA)’ nor Migratory Bird Treaty Act (MBTA)² require Commission

¹ 42 USC §§ 4321-4335.

² 16 U.S.C. § 703 *et seq.*

action; and (3) because the actions being contemplated by the Commission would impose substantial additional burdens on the carrier antenna siting process, making it more difficult to add new sites and hindering carrier efforts to expand service to the public.

I. SCIENTIFIC EVIDENCE DOES NOT SUPPORT COMMISSION ACTION.

The first step in any investigation into whether FCC regulations are necessary to protect migratory birds from collisions with communications towers is an examination of the effect, if any, that communications towers have on migratory bird populations. Towards that end, starting with its Notice of Inquiry in 2003, the Commission has been collecting evidence of the effect of communications towers on migratory birds.³

In response to the Migratory Bird *NOI*, CTIA and NAB submitted comments which included a review of scientific evidence prepared for CTIA and NAB by Woodlot Alternatives, Inc., a leading expert on the causes of avian mortality? The Woodlot Assessment made several conclusions after reviewing the available scientific studies, evidence and observations. Among the Woodlot Assessment findings were:

- Avian mortality due to domestic cats, buildings, windows, transmission lines, pesticides and vehicle collisions are all thought to have a much greater impact on the avian population than collisions with communications towers.

³ Effects of Communications Towers on Migratory Birds, Notice of Inquiry, WT Docket No. 03-187, 18 FCC Rcd 16938 (2003) (hereinafter “Migratory Birds *NOI*”).

⁴ CTIA and NAB Comments, WT Docket No. 03-187 (filed November 12, 2003) (CTIA and NAB *NOI* Comments), Exhibit A, Woodlot Alternatives, Inc., “An Assessment of Factors Associated with Avian Mortality at Communications Towers – A Review of Existing Scientific Literature and Incidental Observations: Technical Comments prepared in response to the August 20, 2003, Notice of Inquiry Issued by the Federal Communications Commission (FCC) WT Docket No. 03-187,” November 2003 (hereinafter “Woodlot Assessment”).

- There have been many incidental reports of avian mortality at certain communications towers. The quality of information in these reports varies widely, with no standard methodology used in collection of data. Due to the incidental and biased nature of these reports it is not possible to examine specific factors that have contributed to avian mortality.
- Very few in-depth studies on avian mortality at communications towers have been conducted. The majority of studies have examined only single towers and made no comparisons between different towers in different sites. . . No published research has systematically examined the host of specific factors that may contribute to mortality at tower sites.
- Because there are few studies that have examined specific factors related to avian mortality at communications towers and due to the limited, speculative, and sporadic nature of the incidental reports it is unclear how most factors associated with towers contribute to avian mortality.
- Several studies have documented a decline in avian mortality at communications towers over the last several decades.
- The most important conclusion reached after reviewing the current literature on avian mortality at communications towers is that there is a need for further research.’

To assist the Commission in its review of scientific studies in the public domain and comments filed in response to the *Migratory Bird NOI*, the Commission retained Avatar, an environmental risk consulting firm. The Commission asked Avatar to determine if the studies were sufficient to support any conclusions about the three primary issues raised in the *Migratory Bird NOI*:

(1) whether collisions with communications towers have an adverse impact on the viability of migratory bird species; (2) what role certain factors (*i.e.*, migration patterns, bird behavior, tower configuration, tower siting, tower lighting, and weather) have on the increasing or decreasing number of such collisions; and (3) whether certain measures might minimize the impacts of tower construction on migratory birds.⁶

⁵ Woodlot Assessment at i, ii.

⁶ *NPRM* at 11, para. 22.

Avatar submitted its findings and recommendations in September of 2004.⁷

Significantly, Avatar's report concluded that, "Although most of the possible solutions for increased avian mortalities associated with communication structures remain speculative, a few conclusions have been advanced with some degree of confidence within the scientific community studying this problem."⁸ Among the conclusions that apply to tower construction, the Avatar Report stated:

- All other things being equal, taller towers with lights tend to represent more of a hazard to birds than shorter, unlit towers.
- Towers with guy wires are at higher risk than self-supporting towers.
- There are no studies to date that demonstrate an unambiguous relationship between avian collisions with communications towers and population decline of migratory bird species.
- More research is warranted in order to identify specific causes and possible solutions to this problem.'

In December of 2004, the Wireless Telecommunications Bureau issued a Public Notice seeking comment on the Avatar Report and conclusions." In response, CTIA and NAB submitted comments attaching a technical comment on the Avatar Report prepared for CTIA and NAB by Woodlot Alternatives, Inc.¹¹ The Woodlot Technical Comment finds many areas of

⁷ Notice of Inquiry Comment Review Avian/Communication Tower Collisions, Final, Prepared for Federal Communications Commission, by Avatar Environmental, LLC (submitted September 30, 2004) (hereinafter "Avatar Report").

⁸ Avatar Report at 5-1.

⁹ *Id.*, at 5-1, 5-2.

¹⁰ Avatar Public Notice, 19 FCC Rcd 24007.

¹¹ CTIA and NAB Comments, WT Docket No. 03-187 (filed February 14, 2005) (hereinafter "CTIA and NAB Avatar Comments"), Exhibit A, Woodlot Alternatives, Inc., "Technical Comment on *Notice of Inquiry Comment Review Avian/Communication Tower Collisions Final* (Avatar et al. 2004)," February 2005 (hereinafter Woodlot Technical Comment).

agreement between the Avatar Report and the Woodlot Assessment. Notably, Woodlot finds that Avatar used methods similar to those used by Woodlot to develop its report. Woodlot concurs in the Avatar Report conclusion that there are “no studies that demonstrate an unambiguous relationship between avian collisions with telecommunications towers and population decline of migratory bird species” and that further research is warranted.¹² Woodlot also finds agreement with Avatar in the conclusion that there is “no evidence in the literature to date indicating that communications towers are having a statistically significant or ‘*biologically significant*’ impact on migratory bird populations.”¹³ Woodlot, however, takes exception to the conclusions, listed above, that Avatar advanced with “some confidence.” Woodlot analyzes each of these conclusions and finds inconsistencies between Avatar’s findings and its conclusions. Woodlot finds that Avatar’s conclusions are speculative and largely unsupported by much of the scientific literature.¹⁴

On February 14, 2005, also in response to the Avatar Report, Dr. Joelle Gehring filed comments with the FCC summarizing preliminary results of a study she performed on migratory bird collisions at several towers operated by the Michigan Public Safety Communications System (MPSCS). In those comments, Dr. Gehring presented the results of her study of 3 guyed and 3 unguyed towers between 116 meters and 146 meters high (380-480 feet above ground level) over

¹² Woodlot Technical Comment at 1.

¹³ *Id.*, at 3.

¹⁴ *Id.*, at 5-6. CTIA and NAB Avatar Comments at 7-8.

twenty consecutive days in three bird migration periods. Ms. Gehring's limited study found that more birds collided with guyed towers compared to unguyed towers.¹⁵

On April 12, 2007, Dr. Gehring submitted another report on her study. This report also included her study of bird collisions with towers of different heights and with different lighting systems. Dr. Gehring's study results from the fall of 2005 observed more collisions with towers over 1000 feet than at medium sized towers (340-480 feet) and also observed more collisions at towers using white strobe lighting as compared with towers using red strobe lights. Dr. Gehring concluded that there were more collisions at towers with steady burning red lights as opposed to towers with either red or white strobe lighting systems.¹⁶

The scientific evidence and literature with respect to migratory bird tower collisions to date does not provide any basis for FCC regulatory action with respect to migratory birds. As discussed above, both Avatar and Woodlot found no linkage whatsoever between migratory bird collisions with communications towers and any significant decline in migratory bird population. Indeed, Avatar found that "over the last five decades of monitoring bird population, the number of bird mortalities at towers is reported to be decreasing while the number of towers is increasing. All long-term studies show a similar decline in total bird mortality . . ."¹⁷

¹⁵ Comments of Joelle Gehring, Ph.D., "Avian Collisions at Communications Towers I, The Role of Tower Height and Guy Wires," WT Docket No. 03-187 (filed February 14, 2005) (hereinafter "Gehring Guyed Tower Results") at 1-5.

¹⁶ Comments of Joelle Gehring, Ph.D and Paul Kerlinger, "Avian Collisions at Communications Towers II. The Role of Federal Aviation Administration Obstruction Lighting Systems," WT Docket No. 03-187 (filed April 12, 2007) (hereinafter "Gehring Lighting Study Results"), at 10-11.

¹⁷ Avatar Report at 3-15.

Even if science had demonstrated that communications towers have a significant impact on migratory bird populations, that evidence alone would not be sufficient to justify regulatory action by the FCC. This is because the scientific community has almost no evidence of the effect on bird mortality of different tower heights, support systems, or lighting systems. While Dr. Gehring's study in Michigan is an important step forwards in trying to analyze the effect of height, support systems, and lighting variables on bird mortality rates, her results cannot be used as the basis for any regulatory action at this time. This is because her study was limited both in terms of the number of towers studied and the period over which they were studied; because Dr. Gehring only studied towers over 380 feet tall – significantly taller than the towers typically used in providing Commercial Mobile Radio Services (CMRS); and because Dr. Gehring's study has not yet been peer reviewed or published.

Until and unless scientific studies, evidence, and literature establish a significant effect in migratory bird populations caused by communications towers and also establish the effect on bird mortality of tower height, lighting systems, and support systems, the Commission cannot justify any migratory bird-related tower sighting regulation.

11. NEITHER THE NATIONAL ENVIRONMENTAL POLICY ACT NOR THE MIGRATORY BIRD TREATY ACT REQUIRE COMMISSION ACTION.

A. NEPA

The Commission seeks comment regarding its authority to adopt regulations under NEPA and tentatively concludes that NEPA may provide a basis for the Commission to promulgate regulations specifically for the protection of migratory birds.¹⁸ Because there is no credible

¹⁸ *NPRM*, at 17-18, paras. 33-34.

evidence to support a finding that there is a significant effect on migratory birds caused by communications towers, however, the Commission cannot use NEPA as a basis for regulations to protect migratory birds.

NEPA requires federal agencies to analyze environmental effects only if there is a major federal action and if that action will significantly affect the quality of the human environment.¹⁹ The record in this proceeding fails to establish that communications towers have a significant impact on migratory birds. The Council on Environmental Quality regulations implementing NEPA provide that the significance of an environmental impact is an agency decision that should be based on both the context and intensity of the impact.²⁰ In the case of evaluating nationwide impacts of communications towers, the regulations require that the agency determine the effects of communications towers on migratory birds nationwide.²¹ The regulations also require the agency to evaluate the effects of the action on public safety,²² and to consider the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.²³

Taken together, these factors lead to the inescapable conclusion that the effect of communications towers on migratory birds cannot be considered “significant.” As discussed above, the Commission’s own expert consultant Avatar concluded that “there are no studies to

¹⁹ 42 U.S.C. § 4332(C).

²⁰ 40 C.F.R. § 1508.27.

²¹ 40 C.F.R. § 1508.27(a).

²² 40 C.F.R. § 1508.27(b)(2).

²³ 40 C.F.R. § 1508.27(b)(5).

date that demonstrate an unambiguous relationship between avian collisions with communications towers and population decline of migratory bird species.” Moreover, the evidence also indicates that migratory bird collisions with communications towers has actually decreased over the last several years while the number of towers has increased. Thus, the evidence cannot establish a significant nationwide impact on migratory birds, and the impact, if any, of towers on migratory birds is, at best, uncertain. Given that there can be no doubt of the public safety benefits of communications towers, the evidence in this proceeding strongly supports a finding that communications towers do not “significantly” affect migratory birds.

B. MBTA

The Commission also seeks comment as to the nature and scope of the Commission’s responsibilities under the Migratory Bird Treaty Act (MBTA), and whether the MBTA gives the Commission authority to issue regulations to enforce the MBTA.²⁴ The MBTA does not provide any basis for FCC action. The MBTA provides that “it shall be unlawful at any time, by any means, or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess . . . any migratory bird . . .”²⁵ However, the only agency authorized under the MBTA to enact regulations regarding when and how migratory birds may be taken, killed or possessed is the Department of the Interior.²⁶ Moreover, the MBTA vests authority to enforce the terms of the MBTA solely with employees of the Department of the Interior.²⁷ Accordingly, the FCC has no

²⁴ *NPRM*, at 18-19, para. 35.

²⁵ 16 U.S.C. § 703.

²⁶ 16 U.S.C. § 704.

²⁷ 16 U.S.C. § 706.

authority under the MBTA to adopt regulations to protect migratory birds and no authority to enforce provisions of the MBTA.

III. COMMISSION REGULATION TO PREVENT MIGRATORY BIRD COLLISIONS WITH COMMUNICATIONS TOWERS ARE NOT WARRANTED AND WOULD IMPOSE SIGNIFICANT BURDENS ON CARRIERS.

In the NPRM, the Commission seeks comment on a number of proposals to regulate the placement, lighting and design of communications in order to protect migratory birds. As discussed above, the record does not support any regulation at this time, and the Commission lacks the requisite authority to adopt such regulations. In addition, as discussed below, the Commission's proposals are flawed and would impose serious undue burdens on carriers and have a detrimental effect on the public interest.

A. Lighting System Regulation

The Commission tentatively concludes that the use of medium intensity white strobe lights for nighttime conspicuity is to be considered the preferred lighting system over red obstruction lighting to the maximum extent possible. It bases this conclusion on evidence that medium intensity white strobe lights may create less of a hazard to migratory birds and the absence of record evidence that the use of such lighting would have an impact on communications facilities deployment. The Commission seeks comment on the cost of deploying such lighting systems and on whether it should require existing towers with different lighting systems to transition to medium intensity white strobe lights.²⁸

²⁸ NPRM, at 20-24.

Verizon Wireless opposes requiring carriers and tower owners to deploy white strobe lighting on new communications towers and requiring existing towers to transition to white strobe lighting systems. First, there is insufficient evidence to support a finding that white strobe lighting would have any significant impact on bird collisions with towers. The Avatar Report discusses the current state of knowledge with respect to tower lighting systems and their effect on nocturnal migrating birds. It states “Although some studies and several anecdotal reports suggest that white strobe lights may be less attractive to birds, this has not been proven to date.”²⁹ It states, further, that “no conclusions can be drawn, based on the existing literature, regarding the importance and effects of lighting color, duration, intensity, and type (e.g. incandescent, strobe, neon, or laser) and bird attraction. Additional research is needed on the types of lights in conjunction with other factors that increase or decrease the risk of bird collisions with communications towers.”³⁰

Part of Dr. Gehring’s study included an analysis of the effect of different lighting systems on bird collisions with communications towers. Dr. Gehring studied 21 Michigan towers ranging in height from 380-480 feet as well as 3 towers over 1000 feet tall. The study evaluated the effects of light systems with white strobe lights, but no solid-on lights, towers with red strobe lights but no solid-on lights, towers with red, blinking, incandescent lights but not solid-on lights, and towers with both red strobe lights and solid-on lights (referred to as “status quo” light systems). Dr. Gehring’s data from the fall of 2005 revealed that there were fewer bird collisions on towers equipped with red strobe lights than on those equipped with white strobe lights.

²⁹ Avatar Report at 3-43.

³⁰ *Id.*, at 3-46.

Importantly, Dr. Gehring did not draw a distinction between red and white strobe lighting systems, concluding that both types of lighting were preferable to red steady-burning lights for reducing bird collisions.³¹ As discussed above, Dr. Gehring's study was very limited and cannot be used as the basis to conclude that any particular lighting system should be used to prevent bird collisions. Nevertheless, her data do not support the Commission's tentative conclusion that white strobe lights are preferable to red obstruction lighting – particularly red strobe lighting -- for reducing migratory bird collisions with communications towers.

Based on the limited scientific evidence available, the Commission simply cannot support its tentative conclusion that white strobe lights are preferable to other lighting systems for reducing migratory bird collisions with communications towers.

Second, the Commission should not adopt a preference for white strobe lighting because such systems are strongly disfavored by residents. As noted in the Avatar Report, “white strobe lighting often is not favored by residents located within sight of a tower; therefore, this becomes an aesthetic issue as well.”³² Verizon Wireless' experience supports Avatar's statement. Because neighbors do not favor nighttime white strobe lighting, it is very difficult to get zoning approval for white strobe lighting systems, and white strobe lighting systems are deployed in only about 4 percent of the thousands of towers Verizon Wireless owns, operates, or manages that are lit.

Third, because so few existing towers have white strobe lighting systems, any requirement to retro-fit existing towers with white strobe lighting would be very costly and

³¹ Gehring Lighting Study Results at 10-11.

³² Avatar Report at 3-43.

burdensome on Verizon Wireless. Verizon Wireless estimates that replacing the lighting system on an existing tower with white strobe lighting would cost \$10,000 per tower for towers under 200 feet tall and \$15,000 for towers over 200 feet above ground level. Considering that Verizon Wireless has over 2000 lit towers that do not have white strobe lighting systems, requiring a change on these towers to white strobe lighting would cost Verizon Wireless well over \$20 million. In addition, before any lighting system could be changed, Verizon Wireless would have to file lighting study applications for each tower with the FAA, and, once approved, amend the tower registration with the FCC. In many cases, Verizon Wireless would be required to apply for and receive zoning permits and/or construction permits to change the existing lighting systems. These requirements would impose even more costs and administrative burdens on carriers.

For these reasons, the Commission should not adopt a white strobe light preference and should not require the retro-fitting of any existing towers with white strobe lighting systems.

B. Guy Wire Regulation

The Commission seeks comment on whether it should adopt any requirement governing the use of guy wires because of the potential impact of guy wires on migratory birds. The Commission sites to a conclusion in the Avatar Report that “towers with guy wires are at higher risk [to birds] than self-supporting towers.”³³ Verizon Wireless opposes regulations concerning the use of guy wires because such regulations are not justified by the record and would impose substantial burdens on wireless carriers.

The Woodlot Technical Comment is highly critical of Avatar’s conclusion with respect to the linkage between guy wires and migratory bird collisions with towers. Woodlot states that

³³ *NPRM*, at 24, para. **48**, *citing* Avatar Report at 5-1.

Avatar's conclusion about the effect of guy wires on migratory bird collisions is not consistent with the discussion on guy wires contained elsewhere in the Avatar Report. Specifically, Woodlot points out that the Avatar Report states that "No specific studies comparing avian collisions with guyed towers to self-supporting structures were found as part of this review. Additionally, it would be difficult to differentiate causal factors between guyed structures and tower height, as tall towers require guy wires."³⁴ Dr. Gehring's study did include an analysis of bird collisions with guyed towers compared to unguyed towers and noted that more bird collisions were found with guyed towers compared to unguyed towers.³⁵ However, this study, as discussed above, cannot be relied upon as the basis for regulation due to the small sample size and lack of peer review. Because there is no conclusive record evidence that towers with guy wires cause more migratory bird collisions than unguyed towers, there is no basis for FCC regulation.

Verizon Wireless uses guy wires to support about 25 percent of the towers it owns, operates or manages. Guy wires are typically used to support taller communications towers. Taller towers are typically built in rural areas and along highways as a means to increase coverage in those areas. Taller towers also provide more opportunities for collocation since the taller the tower, the more space there is on the tower for other carriers' antennas.

Guy wires are used for engineering reasons (to support tall towers where self supporting towers are not possible); economic reasons (guy wires are cheaper to install than other means of supporting tall towers); and for other factors such as community and zoning authority preference

³⁴ Woodlot Technical Comment at 6, *citing* Avatar Report at 3-35.

³⁵ Gehring Guyed Tower Results at 1-5.

(the profile of non-guyed towers is significantly greater than that of guyed towers so guyed towers are often preferred for aesthetic reasons). Because of these factors, a ban on guyed towers would effectively limit the height of towers. Shorter towers means that carriers would need to build more towers to obtain the same coverage objectives and would limit collocation opportunities. This would also put carriers and tower owners directly at odds with communities and zoning boards, which want carriers to build fewer towers and which encourage collocation on existing towers. Building more towers would also substantially increase tower siting costs, thus limiting carriers' ability to add new sites to expand into new areas, deploy broadband services, and add capacity.

For these reasons, the Commission should not adopt any regulations limiting the use of guy wires on communications towers.

C. Tower Height Regulation

The NPRM also seeks comment on whether it should adopt any regulation relating to the height of telecommunications towers. It notes, in that regard, that the Avatar Report found that “all other things being equal, taller towers with lights tend to represent more of a hazard to birds than shorter, unlit towers.”³⁶ As with regulation banning guy wires, there is no record support for imposing any particular height restriction on communications towers, and any such restrictions would impose significant costs on carriers and limit carriers' ability to build new sites.

The Woodlot Technical Comment on the Avatar Report was critical of Avatar's conclusory statement regarding tower height. Woodlot notes that Avatar found that “existing data are not sufficient to draw direct conclusions between tower height and migratory bird

³⁶ NPRM, at 26, para 56, *citing* Avatar Report at 5-1.

collisions. The critical threshold for tower height has not been definitively determined relative to bird collision risks. Although some assumptions have been made on tower height effects, additional information is warranted.”³⁷ Dr. Gehring’s study found more bird collisions with taller towers (towers over 1000 feet above ground level) than at medium height towers (towers between 380 and 480 feet above ground level), but no conclusions about the effect of height alone can be drawn from Gehring’s research because the tall towers used in her study were both guyed and lit, making it impossible to say with any measure of certainty that height alone was a cause of the collisions.³⁸ Moreover, Dr. Gehring did not study the affect on migratory birds of any towers shorter than 380 feet, so her data cannot possibly lead to any conclusions on towers shorter than 380 feet.

As discussed above with respect to guyed towers, any limit on tower height will have serious and significant impacts on tower siting. Shorter towers will limit coverage and collocation opportunities and, as such, will not serve the public interest. For these reasons, the Commission should not impose any tower height regulations.

D. Tower Location Regulation

The Commission seeks comment on whether it should consider some Commission action regarding the location of communications towers. It notes that Avatar concluded that “the greatest bird mortality tends to occur on nights with low visibility conditions, especially fog, low cloud ceiling, or other overcast conditions.”³⁹ As the Commission recognizes, however, Avatar

³⁷ Woodlot Technical Comment at 5, *citing* Avatar Report at 3-36.

³⁸ Gehring Lighting Study Results at 9-10.

³⁹ *NPRM*, at 27, para. 59, *citing* Avatar Report at 5-1.

did not reach any conclusions regarding particular locations such as on ridge lines or in wetlands.⁴⁰ In addition, the Woodlot Technical Comment points out that Avatar states in its discussion that the association between weather and collision events is essentially unknown.⁴¹

The record in this proceeding simply does not contain any basis for the Commission to consider any action limiting the placement of communications towers in particular areas. Moreover, limiting towers in particular areas will effectively deny those areas of wireless coverage thus denying the public safety benefits of wireless service in those areas and preventing residents and visitors to those areas from receiving wireless service.

E. Collocation Regulation

The Commission seeks comment on whether it should adopt additional requirements on collocation as a means of limiting the number of communications towers and thereby preventing bird collisions with towers.⁴² Commission regulation to require collocation is not necessary. The Commission's rules already state that "the use of existing buildings, towers or corridors is an environmentally desirable alternative to the construction of new facilities and is encouraged."⁴³ Moreover, local zoning authorities already strongly favor collocation and require carriers in most cases to demonstrate that collocation opportunities will not meet carrier coverage needs prior to approving a new tower application. Accordingly, any additional Commission collocation requirements would be entirely duplicative and unnecessary. In addition, as discussed above,

⁴⁰ *Id.*

⁴¹ Woodlot Technical Comment at 5, *citing* Avatar Report at 3.3.7.

⁴² *NPRM*, at 27-28, para. 60.

⁴³ 47 C.F.R. § 1.1306, Note 1.

some of the other measures the Commission is considering in this proceeding to protect migratory birds will serve to make collocation more difficult. As such, any additional collocation requirements would be harder to meet if those other measures are adopted.

F. Amending Section 1.1.307 to Require Environmental Processing with Respect to Migratory Birds

The Commission seeks comment as to whether it should amend Section 1.1307(a) of its rules to require environmental processing with respect to migratory birds.⁴⁴ Such a requirement would require carriers to take effects on migratory birds into consideration when evaluating new tower sites and would require carriers to submit environmental assessments on sites where the siting activity could significantly affect migratory birds. As discussed throughout these comments, there is not sufficient scientific evidence at this time to conclude that communications towers have any significant effect on migratory birds. There is therefore no basis for any carrier or regulatory agency to determine that any potential site has any significant affect on migratory birds. Accordingly, there is no basis for the Commission to amend its rules to require environmental processing with respect to migratory birds.

⁴⁴ *NPRM*, at 28-29, paras. 61-64.

IV. CONCLUSION

At this time, there is insufficient scientific evidence to support a conclusion that communications towers, or any particular feature of those towers such as lighting systems, guy wires, tower height, or tower location have any significant affect on migratory birds. As such, there is no basis for the Commission to take any action or adopt any regulations imposing tower siting restrictions to protect migratory birds.

Respectfully submitted,

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